

IN RE JONES

No. 5249

UNITED STATES COURT OF CUSTOMS AND PATENT APPEALS

34 C.C.P.A. 1150; 162 F.2d 479; 1947 CCPA LEXIS 518; 74 U.S.P.Q. (BNA) 149

May 7, 1947, Oral argument by Mr. Rivise and Mr. Moore

June 17, 1947, Decided

DISPOSITION: {***1} Modified.

HEADNOTES: PATENTS

1. CLAIMS--BROAD OR NARROW--CHEMICAL CASES

In determining propriety of Markush grouping, compounds grouped must each be considered as whole and should not be broken down into elements or other components; in any Markush group, compounds will differ from each other in certain respects; differences must, to some extent, be weighed against similarities; whether group is proper must be decided in view of facts of each case; inclusion in Markush groups of compounds differing widely in some respects has been permitted.

2. CLAIMS--BROAD OR NARROW--CHEMICAL CASES

All claimed compounds belong to genus of tetralyl compounds having substituted methyl group at position 6, but it is not established that all members of genus would be suitable for applicant's purpose, so applicant cannot claim entire genus; it is necessary to limit Markush claims, which are allowed, to individual compounds known to possess desired property.

3. CLAIMS--DUPLICATE OR REDUNDANT

Addition of statement of use to claim to compound does not produce materially different claim, so claim is rejected as duplicate.

4. CLAIMS--DUPLICATE OR REDUNDANT

In re Jones, 65 U.S.P.Q. 480, held that where claim to compound is allowed, claim to insecticidal and fungicidal composition having that compound as active ingredient is not patentable.

COUNSEL: Caesar and Rivise (C. W. Rivise and A. D. Caesar of counsel) for appellant.

W. W. Cochran (Clarence W. Moore of counsel) for the Commissioner of Patents.

JUDGES: Before BLAND, Acting Presiding Judge, and HATFIELD, JACKSON, and O'CONNELL, Associate Judges. GARRETT, Presiding Judge, did not participate in the decision. BLAND, Judge, dissenting in part.

OPINIONBY: HATFIELD

OPINION: {*1151} APPEAL from Patent Office, Serial No. 393,248

HATFIELD, Judge, delivered the opinion of the court:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting Claims 1, 2, 6, 7, 9, 10, and 11 in appellant's application for a patent for an invention relating to a composition of matter.

Claims 1, 2, 6, 7, and 11 are representative of the appealed claims. They read:

1. The substance selected from the group consisting of tetralyl-6-acetonitrile, tetralyl-6-acetic acid, the lower esters and alkali metal salts of said acid, tetralyl-6-acetamide, tetralyl-6-methyl thiocyanate and tetralyl-6-methyl isothiocyanate.

2. Tetralyl-6-acetonitrile.

6. A growth regulating composition for plants having as an active {***2} ingredient thereof a substance selected from the group consisting of tetralyl-6-acetonitrile, tetralyl-6-acetic acid, the lower esters and alkali metal salts of said acid, tetralyl-6-acetamide, tetralyl-6-methyl thiocyanate and tetralyl-6-methyl isothiocyanate.

7. A growth regulating composition for plants having as an active ingredient thereof tetralyl-6-acetonitrile.

11. An insecticidal and fungicidal composition having as an active ingredient thereof a substance selected from the group consisting of tetralyl-6-methyl thiocyanate and tetralyl-6-methyl isothiocyanate.

Claims 4 and 5 in appellant's application were allowed by the Board of Appeals. They read:

4. Tetralyl-6-acetamide.

5. The substance selected from the group consisting of tetralyl-6-methyl thiocyanate and tetralyl-6-methyl isothiocyanate.

Claims 1 and 6 were rejected as being drawn to improper Markush groups. Claims 6, 7, 9, 10, and 11 were rejected as being substantial duplicates of claims 1, 2, 4, and 5, as hereinafter explained, and claims 2 and 7 were rejected as being drawn to nonelected species. The Primary Examiner also rejected the claims on prior art, but that rejection was reversed by the Board of Appeals {***3} and, therefore, is not before us for consideration.

Appellant's application relates to certain derivatives of tetralin (tetrahydro-naphthalene.) It appears from the brief of the Solicitor for {*1152} the Patent Office, that tetralin is a "naphthalene to which four atoms of hydrogen have been added," the resultant structure "consisting of a benzene ring and a partially saturated six carbon ring, sharing two carbon atoms." In each of the derivatives claimed by appellant, a methyl side chain is attached to the ring structure, the point of attachment being the same in the case of each derivative. All the compounds claimed are said to be effective agents for stimulating plant growth and some of them are stated to be insecticides and fungicides.

Claims 1 and 6 were rejected on the ground that the substances claimed in them are not so related that they can properly be included in a Markush group. The same group is recited in each of those claims and comprises substances of various types--nitriles, acids, alkali metal salts, the lower esters, and thiocyanates. The examiner held that those substances differed from each other to such an extent that they could not properly be included {***4} in a single claim. The examiner's decision was affirmed by the Board of Appeals, which stated in its decision that "whether a group is proper must be decided in view of the facts of each particular case." The board concluded that under the circumstances of this case, the substances included in claims 1 and 6 were so different that the examiner's holding was proper.

Counsel for appellant point out in their brief that each of the compounds which are grouped in the appealed claims includes a tetralyl nucleus with a methyl side chain at position 6, and that the tetralyl nucleus is, in each case, the heaviest part of the molecule. Furthermore, each of the compounds is effective as a growth regulating composition for plants.

The Primary Examiner stated that the attached chain portion is of more importance than the nucleus in determining the character of the compound and that the compounds grouped in appealed claims 1 and 6, include acids, salts, esters, and thiocyanates, some of which are "entirely diverse in structure, properties and characteristics."

Whether or not one portion of a compound is considered more important than another depends upon the purpose for which the compound is {***5} intended. The side chains of claims 1 and 6 are not the most important factors in determining the molecular weights of the compounds, nor are they the most important factors in determining the value of the compounds in the regulation of plant growth, since the compounds grouped in claims 1 and 6 are all effective plant growth regulators, despite a wide difference in their side chains. [1] In determining the propriety of a Markush grouping, moreover, the compounds which are grouped must each be considered as a whole and should not be broken down into elements or other components.

In its decision, the board stated:

{*1153} In general, the nucleus which is common to all members of the group, imparts similar properties to the members and the substituents impart differentiating properties.

It is evident that in any Markush group, the compounds which are included will differ from each other in certain respects. In determining the propriety of the grouping, those differences must, to some extent, be weighed against the similarities and, as hereinbefore noted, the board pointed out in its decision that "whether a group is proper must be decided in view of the facts of each particular {***6} case." The inclusion in Markush groups of compounds which differed widely in some respects, has been permitted. Thus in *Ex parte Clarke and Malm*, 1931 C. D. 6, 11 U.S.P.Q. 52, the Commissioner of Patents permitted the inclusion of aliphatic, aromatic and aralkyl compounds in a single group. In *Ex parte Kendall*, 56 U.S.P.Q. 119, the Board of Appeals permitted the grouping of substances which varied "in the character of the connecting chain," and in *Ex parte Dahlen et al.*, 1934 C. D. 9, 42 U.S.P.Q. 208, the board permitted the grouping of compounds having nuclei and side chains, despite the fact that the allowed claims covered a wide variation in the composition of the side chains.

In the instant case no authority was cited by either of the tribunals of the Patent Office in support of the conclusion that the compounds called for by claims 1

and 6 are so dissimilar in their properties as to be repugnant to principles of scientific classification.

In our decision in *In re Swenson et al.*, 30 C.C.P.A. 764, 132 F.2d 336, 56 U.S.P.Q. 180, we approved the Patent Office practice with respect to claims of the Markush type, {***7} as defined in a number of decisions by the Commissioner of Patents, including *Ex parte Burke*, 1934 C. D. 5, 21 U.S.P.Q. (BNA) 399. In that case the commissioner said:

The group system was resorted to because of the existence of cases where certain substances, which an inventor by experiment has found available for his purpose, fall within a generic group, but there is nothing to establish that all the species of that group have such similar characteristics as to make them available for this purpose and there is no known subgeneric term which would include only the species which have been found available.

[2] This language seems to apply to the present situation in which all the claimed compounds belong to the genus of tetralyl compounds having a substituted methyl group at position 6, but it is not established that all members of this genus would be suitable for appellant's purposes. Accordingly, appellant could not properly claim this entire genus and it was necessary to limit his claims to the individual compounds which were known to possess the desired property.

{*1154} We have carefully considered the views expressed by the Patent Office tribunals, but {***8} are of opinion that, under all the circumstances of this case, the substances grouped have "a community of chemical or physical characteristics" which justify their inclusion in a common group, and that such inclusion is not repugnant to principles of scientific classification, within the meaning of such decisions as *Ex parte Burke, supra*, and *In re Swenson et al., supra*.

It follows, from what has been said, that claim 1 is allowable and, as that claim is generic, the rejection of claims 2 and 7 on the ground that they are drawn to a non-elected species must be reversed.

There remains to be considered the rejection of claims 6, 7, 9, 10, and 11 on the ground that they are substantial duplicates of other claims. Claim 6 was rejected as a duplicate of claim 1; claim 7 as a duplicate of claim 2; claim 9 as a duplicate of allowed claim 4; and claims 10 and 11 as duplicates of allowed claim 5. Claims 6, 7, 9, and 10 correspond to claims 1, 2, 4, and 5, respectively, except that the claims of the latter group are drawn to compounds *per se*, whereas the claims of the former group--6, 7, 9, and 10--call for growth regulating compositions having as active ingredients {***9} the identical compounds defined

in claims 1, 2, 4, and 5, respectively. Similarly, claim 11 calls for an insecticidal and fungicidal composition having as an active ingredient the compound defined in claim 5.

[3] It was held by the Patent Office tribunals, on the authority of *In re Thuau*, 30 C.C.P.A. 979, 135 F.2d 344, 57 U.S.P.Q. 324, that the addition of a statement of use to a claim to a compound does not produce a materially different claim.

Counsel for appellant seek to distinguish this case from *In re Thuau, supra*, on the ground that claims 6, 7, 9, 10, and 11 are not drawn to the compounds of claims 1, 2, 4, and 5, *per se*, but to growth regulating compositions or insecticidal and fungicidal compositions having those compounds as active ingredients. However, claims 6, 7, 9, 10, and 11 do not state that the growth regulating or insecticidal and fungicidal compositions include anything in addition to the compounds called for in claims 1, 2, 4, and 5. The mere use in claims 6, 7, 9, 10, and 11 of language which is broad enough to permit the inclusion of some unspecified ingredient or ingredients in addition to the compounds of claims 1, {***10} 2, 4, and 5, does not justify a holding that the claims of the two groups define different inventions.

[4] The issue presented as to claims 6, 7, 9, 10, and 11 is substantially identical with that in *In re Jones*, 32 C.C.P.A. 1020, 149 F.2d 501, 65 U.S.P.Q. 480. In that case we held that when a claim to a compound had been allowed, a claim to an insecticidal and fungicidal {*1155} composition having that compound as an active ingredient was not patentable.

For the reasons stated, the decision of the Board of Appeals is *modified*, being *reversed* as to claims 1 and 2, and *affirmed* as to claims 6, 7, 9, 10, and 11.

By reason of illness, GARRETT, Presiding Judge, was not present at the argument of this case and did not participate in the decision.

DISSENTBY: BLAND

DISSENT: BLAND, Judge, dissenting in part.

In the next to the last paragraph of the majority opinion is the following sentence:

In that case we held that when a claim to a compound had been allowed, a claim to an insecticidal and fungicidal composition having that compound as an active ingredient was not patentable.

My views as to when a use claim for a patented article or an old article should {***11} be allowed are expressed in my concurring opinion in *In re Migrdichian*, 33 C.C.P.A. 1224, 156 F.2d 250, 70

U.S.P.Q. 403. I took the same position with respect to the *Thuau* case, 30 C.C.P.A. 979, 30 C.C.P.A. 979, 135 F.2d 344, 57 U.S.P.Q. 324, in *In re Haller* (Patent Appeal No. 5273), 34 C.C.P.A. 1003, 161 F.2d 280, 73 U.S.P.Q. 403.

In the instant case the inventor invented a new compound which may have many uses of great value other than as an insecticide and fungicide. He also discovered that on plant life it was especially useful. Here he has made two related inventions and he should be allowed claims to the article and to its use if such use is new, unobvious and useful. The public is entitled to his teachings as to use and he is entitled to protection on his discovery as to use.

The particular part of the *Thuau* case which I have urged my associates to modify reads as follows:

The doctrine is so familiar as not to require citation of authority that a patentee is entitled to every use of which his invention is susceptible, whether such use be known or unknown to him. Likewise, with regard to an unpatentable article or substance {***12} long in use, *any member of the public has the right to every use of which the article or substance is susceptible so long as it is unchanged in any way, regardless of whether or not such uses were known prior to his own use.* [Italics mine.]

The discovery that sulfur, a very old, unpatented article, was useful in the vulcanization of rubber resulted in a valid patent, and by the same token the discovery that an old article produces new, useful and unobvious results as a fumigant or as a disinfectant may be inventive. The same is true as regards a patented article if the new use claimed is not an obvious one.

Citation #4
2002 US App LEXIS 14328